

WHAT IS CLAIMED IS:

- 1 1. An article of manufacture for managing devices, wherein the article of
2 manufacture causes operations to be performed, the operations comprising:
3 receiving a request implemented via at least one device independent class;
4 traversing a class hierarchy database to determine at least one device specific
5 class that corresponds to the at least one device independent class, wherein the class
6 hierarchy database stores a class hierarchy and associations between classes; and
7 modifying the received request, wherein in the modified request the least one
8 device independent class has been translated to the at least one device specific class.

- 1 2. The article of manufacture of claim 1, the operations further comprising:
2 mapping at least one device independent class attribute to at least one device
3 specific class attribute in the modified request;
4 mapping at least one device independent property to at least one device specific
5 property in the modified request;
6 generating a device specific request from the modified request, in response to
7 mapping the at least one device independent class attribute and the at least one device
8 independent property; and
9 sending the device specific request to a managed device.

- 1 3. The article of manufacture of claim 1, the operations further comprising:
2 further modifying the received request to include at least one association between
3 device specific classes in the class hierarchy.

- 1 4. The article of manufacture of claim 1, wherein the received request
2 indicates a source class and a requested class, the operations further comprising:
3 determining a specific association between a first device specific class that
4 corresponds to the source class and a second device specific class that corresponds to the
5 specific class, wherein the specific association corresponds to a managed device.

1 5. The article of manufacture of claim 4, wherein the source class represents
2 storage pools and the requested class represents storage volumes corresponding to a
3 storage pool.

1 6. The article of manufacture of claim 1, wherein the received request
2 indicates a source class and a base association, the operations further comprising:
3 determining a first device specific class from the class hierarchy database,
4 wherein the first device specific class has a specific association with a second device
5 specific class that corresponds to the indicated source class, and wherein the specific
6 association corresponds to the base association.

1 7. The article of manufacture of claim 1, wherein the receiving, traversing,
2 and modifying are performed by a proxy, the operations further comprising:
3 generating a device specific request in a device specific language; and
4 sending the device specific request in the device specific language to a managed
5 device coupled to the proxy.

1 8. The article of manufacture of claim 1, wherein the request is received
2 from a Common Information Model application, and wherein the at least one device
3 independent class is specified by a Common Information Model schema.

1 9. The article of manufacture of claim 1, wherein the request comprises a
2 command that is part of an object oriented management schema for managing non-
3 homogeneous devices in a network environment.

1 10. The article of manufacture of claim 9, wherein the management schema
2 comprises the Common Information Model.

1 11. A method for managing devices, the method comprising:

2 receiving a request implemented via at least one device independent class;
3 traversing a class hierarchy database to determine at least one device specific
4 class that corresponds to the at least one device independent class, wherein the class
5 hierarchy database stores a class hierarchy and associations between classes; and
6 modifying the received request, wherein in the modified request the least one
7 device independent class has been translated to the at least one device specific class.

1 12. The method of claim 11, further comprising:
2 mapping at least one device independent class attribute to at least one device
3 specific class attribute in the modified request;
4 mapping at least one device independent property to at least one device specific
5 property in the modified request;
6 generating a device specific request from the modified request, in response to
7 mapping the at least one device independent class attribute and the at least one device
8 independent property; and
9 sending the device specific request to a managed device.

1 13. The method of claim 11, further comprising:
2 further modifying the received request to include at least one association between
3 device specific classes in the class hierarchy.

1 14. The method of claim 11, wherein the received request indicates a source
2 class and a requested class, the method further comprising:
3 determining a specific association between a first device specific class that
4 corresponds to the source class and a second device specific class that corresponds to the
5 specific class, wherein the specific association corresponds to a managed device.

1 15. The method of claim 14, wherein the source class represents storage pools
2 and the requested class represents storage volumes corresponding to a storage pool.

1 16. The method of claim 11, wherein the received request indicates a source
2 class and a base association, the method further comprising:
3 determining a first device specific class from the class hierarchy database,
4 wherein the first device specific class has a specific association with a second device
5 specific class that corresponds to the indicated source class, and wherein the specific
6 association corresponds to the base association.

1 17. The method of claim 11, wherein the receiving, traversing, and modifying
2 are performed by a proxy, the method further comprising:
3 generating a device specific request in a device specific language; and
4 sending the device specific request in the device specific language to a managed
5 device coupled to the proxy.

1 18. The method of claim 11, wherein the request is received from a Common
2 Information Model application, and wherein the at least one device independent class is
3 specified by a Common Information Model schema.

1 19. The method of claim 11, wherein the request comprises a command that is
2 part of an object oriented management schema for managing non-homogeneous devices
3 in a network environment.

1 20. The method of claim 19, wherein the management schema comprises the
2 Common Information Model.

1 21. An system for managing devices, comprising:
2 a processor; and
3 program logic including code capable of causing the processor to perform:
4 receiving a request implemented via at least one device independent class;

5 traversing a class hierarchy database to determine at least one device
6 specific class that corresponds to the at least one device independent class, wherein the
7 class hierarchy database stores a class hierarchy and associations between classes; and
8 modifying the received request, wherein in the modified request the least
9 one device independent class has been translated to the at least one device specific class.

1 22. The system of claim 21, further comprising:
2 a managed device, wherein program logic is further capable of causing the
3 processor to perform:
4 mapping at least one device independent class attribute to at least one
5 device specific class attribute in the modified request;
6 mapping at least one device independent property to at least one device
7 specific property in the modified request;
8 generating a device specific request from the modified request, in response
9 to mapping the at least one device independent class attribute and the at least one device
10 independent property; and
11 sending the device specific request to the managed device.

1 23. The system of claim 21, wherein the program logic is further capable of
2 causing the processor to perform:
3 further modifying the received request to include at least one association between
4 device specific classes in the class hierarchy.

1 24. The system of claim 21, further comprising:
2 a managed device, wherein the received request indicates a source class and a
3 requested class, and wherein the program logic is further capable of causing the processor
4 to perform:

5 determining a specific association between a first device specific class that
6 corresponds to the source class and a second device specific class that corresponds to the
7 specific class, wherein the specific association corresponds to the managed device.

1 25. The system of claim 24, wherein the source class represents storage pools
2 and the requested class represents storage volumes corresponding to a storage pool.

1 26. The system of claim 21, wherein the received request indicates a source
2 class and a base association, and wherein the program logic is further capable of causing
3 the processor to perform:

4 determining a first device specific class from the class hierarchy database,
5 wherein the first device specific class has a specific association with a second device
6 specific class that corresponds to the indicated source class, and wherein the specific
7 association corresponds to the base association.

1 27. The system of claim 21, further comprising:
2 a proxy, wherein the processor is included in the proxy; and
3 a managed device coupled to the proxy, wherein the receiving, traversing, and
4 modifying are performed by the proxy, and wherein the program logic is further capable
5 of causing the processor to perform:

6 generating a device specific request in a device specific language; and
7 sending the device specific request in the device specific language to the
8 managed device.

1 28. The system of claim 21, wherein the request is received from a Common
2 Information Model application, and wherein the at least one device independent class is
3 specified by a Common Information Model schema.

1 29. The system of claim 21, wherein the request comprises a command that is
2 part of an object oriented management schema for managing non-homogeneous devices
3 in a network environment.

1 30. The system of claim 29, wherein the management schema comprises the
2 Common Information Model.

1 31. An system for managing devices, comprising:
2 means for receiving a request implemented via at least one device independent
3 class;
4 means for traversing a class hierarchy database to determine at least one device
5 specific class that corresponds to the at least one device independent class, wherein the
6 class hierarchy database stores a class hierarchy and associations between classes; and
7 means for modifying the received request, wherein in the modified request the
8 least one device independent class has been translated to the at least one device specific
9 class.

1 32. The system of claim 31, further comprising:
2 means for mapping at least one device independent class attribute to at least one
3 device specific class attribute in the modified request;
4 means for mapping at least one device independent property to at least one device
5 specific property in the modified request;
6 means for generating a device specific request from the modified request, in
7 response to mapping the at least one device independent class attribute and the at least
8 one device independent property; and
9 means for sending the device specific request to a managed device.

1 33. The system of claim 31, wherein the received request indicates a source
2 class and a base association, the system further comprising:

3 means for determining a first device specific class from the class hierarchy
4 database, wherein the first device specific class has a specific association with a second
5 device specific class that corresponds to the indicated source class, and wherein the
6 specific association corresponds to the base association.